



Mothing in the Gambia

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Several times when I have been surfing the internet looking for moth-related items I have come across pictures of tropical moth catches. They have shown white sheets absolutely plastered in all types of moths, many looking very spectacular. As a result I have wanted to have a go at tropical mothing myself but never really expected to do so. Then whilst at work I heard a travel programme on Radio Four which featured a section on Gambia in West Africa and mentioned the three most important factors that I thought necessary for a tropical mothing session.

- 1). The official language was English.
- 2). It was only a six-hour direct flight from England.
- 3). It was cheap.

As soon as I got home I looked up Gambia and moths on the Internet. The result was just one site which was that of the Makasuto Wildlife Trust (MWT) based at Abuko nature reserve. At the same time there was a week available at a very good hotel in January for slightly less than £450 a head including meals! Just to add an incentive the Abuko nature reserve was only a few miles from the hotel and they had an e-mail address. The trip was on.

I have to admit to knowing nothing about moth-catching in Africa but I wasn't going to let a minor detail like that get in the way. I e-mailed the MWT to ask them about moth trapping – what I would like to do and what time of year was best. Also listed on the MWT web site was the total Gambian moth list; about 85 species, the largest family being hawk moths. The reply was encouraging in that they would be delighted to see me but they really had no idea as to what time of year would be best, but we could talk in January. Information gleaned from the Internet did not really give much extra information about flight times and African moth catches, with even less about West Africa. I wanted to get a look at the country, having never been to Africa before, and eagerly awaited the trip in January 2007.

A very enjoyable holiday ensued with lots of bird watching around the hotel and surrounding countryside. A walk in the evening touring the hotel lights produced a few moths – mostly pyralids and quite dull but that did not put me off. A meeting with Malang Jambang (the then



acting director of the MWT) was very fruitful in that they would be very keen to have moth trapping done at Abuko Nature Reserve and they also had basic accommodation which I could use. They also had a generator which would make my equipment list a lot lighter for air travel.

At Abuko they have been doing butterfly transects on a weekly basis for several years but had very little knowledge about the moths' flight times. Butterfly numbers peaked at the end of October/ early November so this fitted neatly with my forthcoming holiday arrangements and also air flight times during the holiday season in West Africa (October – April).

During the intervening months I met up with a friend, Graham Finch, who wanted to join me on the trip. This made transporting both equipment and personal effects much easier and would be good company for the trip. Graham is a much more experienced moth-er than me and also very knowledgeable about birds, another interest we both share.

We arrived in Gambia in the early afternoon of 10th November 2007 and were quickly installed in the nature reserve compound. There was a restaurant opposite the main entrance to the reserve which had closed but when we knocked on the door and asked for a meal each evening at 5.00pm every day for the next week, they soon agreed. We soon made friends with the staff and had some great conversations which once or twice meant that we were a little late in getting the traps on after our meal!

That evening we set up in Abuko just a hundred yards or so from the compound in an area of savannah forest with open grassy patches and medium height tree cover. We operated a single 125W mercury vapour bulb suspended over a white sheet on the ground. Trapping took place from dusk (about 7.30pm) until shortly after midnight, by which time few new species were arriving at the sheet. Malang accompanied us to see how we worked and to talk. He sent out one or two of his staff most evenings to help us and to learn.

Unfortunately we soon found out that November is not the best time for moth catching but it was still very rewarding. Most of what we caught could not be identified because there is very little reference material but we could guess at families for most of our catch and specimens were taken for future reference.

That first night we caught several hawk moths species but by far the commonest group caught were pyralids which were delightful in their



variety and colours. A few of the moths we caught were identified because they were species we get in the UK although they are rare species over here, eg Levant Blackneck, *Tathorhynchus exsiccata*. Although the catch was a little disappointing in that we were not inundated with weird and wonderful species, with hindsight it was much better for us because we would have had difficulty coping with a deluge. By the end of the trapping session, though, we had caught over a hundred species which is always a good night in my view.

During the week we trapped on six different occasions in a variety of habitats around the reserve which included the edge of a permanent pool (which contained crocodiles!); tropical gallery forest; dry savannah grassland, and intermediates between them. The number of species caught declined very rapidly during the week, so on the final night we trapped at our first site back near the compound again to see how the two catches varied. The second catch at the compound was very low but still attracted more than twenty species new to the trip, so it was hard to be disappointed even though numbers had dropped off so quickly. We have no information to explain the drop in numbers except that we were now almost two months into the dry season and we think that the decline was that we hit the tail end of moth activity.

A recent e-mail conversation with a Finnish couple who trapped during February 2009 revealed that they caught about twenty species in the whole week, which does support this view. I have since found out that the peak season for moth activity is the rainy season which in Gambia starts about July and ends during September. However it is difficult, and a lot more expensive, to visit the country during those few months when the holiday season is closed.

Collecting any form of wildlife is illegal in Gambia without permission from the Department of Wildlife and Parks Management. Any specimens taken out of the country are only permitted if they remain the property of Gambia and are available to be returned if and when required. However the appropriate licence is not difficult to come by, and it is a means of gathering revenue by the DWPM. By the end of the six nights' collecting we had papered just under 400 specimens of about 200 species and this was where the difficulties now lay.

Having prepared and set the specimens back in England I now had the task of identifying them. Very few books exist to help and there is even less information available on the Internet. A few museums have photos posted on the net but these tend to be of some type specimens



and not all the species they hold within the collection. Many hours of trawling through the Internet did give rise to names for some species and at least family or generic names for many others but it was slow work and difficult to know if the specimen I held was the actual species illustrated, or a close relative, because the individual I had might not exactly fit the example on the Internet and, without other related species, how do you know if the illustration is variable or if there are several closely marked species to consider?

The only real way to gain accurate identifications was to visit the Natural History Museum in London and start searching through the reference collection draws. My thanks go to Martin Honey and his staff for making Graham and myself welcome and for helping us get started in our search. Firstly we were pointed in the direction of the best books to look through before we were introduced to the filing system and two huge rooms full of row upon row of specimen drawers. I have made several subsequent visits to the collection and each time I manage to come away with about twenty new identifications after about six hours of searching.

So far we have managed to identify 147 specimens, most to species level but some only to genus. I have several dozen specimens that do not appear to be in the NHM collection and some on which I still have more work to do, but that will have to wait for now as I am due to move out to Gambia shortly so I can spend more time working on the moths. The present list of Gambian species is now just over 200.

I am hoping to improve the amount of information available to moth hunters in Africa by photographing live and set moths and placing them on the Internet at www.africanmoths.com with as many species identified as possible.

Species identified Abuko nature reserve, The Gambia 10th - 15th November 2007.

PTEROPHORIDAE

(Probably) *Pterophorus albidus*

ARCTIIDAE

Amerila saalmulleri

Apisa bourgognei

COSSIDAE

Azygophleps inclusa

Atteva syncallii



GEOMETRIDAE

Aprochiaria spp.
Chaisma nubilata
Coenina dentaria
Isturgia catalaunaria
Melinoessa fulvescens
Semiothisa majestic
Tephrina purlinda
Zamarada seydeli
Zamarada suda
Scopula dysmorphia
Traminda neptunaria

LASIOCAMPIDAE

Chrysopsyche imparilis
Mimopacha brunnea

LIMACODIDAE

Biribama saturata
Latoia amans

LYMANTRIIDAE

Beralade perobliqua
Crorenia mentions
Dasychira heiroglyphica
Dasychira poliotis
Euproctis fasciata
Euproctoides acrisia

NOCTUIDAE

Acontia basifera
Acontia gratiosa
Acontia wahlbergi
Cretonia platyphaeella
Eublemmoides truncate
Schausia leona
Aubrina sobrina
Acantholipes circumdata
Bareia incidens
Catephia alchymista
Episparis penetrate



Maxera brachypecten
Maxera marchalii
Maxera nigriceps
Melanephia trista
Oedebasis prionofratia
Plusiodontia commoda
Sarothroceras bathisalis
Trichopalpina zethesia
Acbea catella
Anoba atriplaga
Anomis flava
Anomis involuta
Anomis sabacifera
Antarchaea subflavalis
Anticarsia irrorata
Anua davidoides
Anua melonconisia
Athyrra discimacula
Audea kathrina
Caranilla angularis
Entomogramma pardus
Heliophisma xanthoptera
Heiliophisma xanthoptera demaculata
Libystica simplex
Mocis convienens
Mocis mayeri
Ophiusa overlaeti
Parallelia algira
Pericyma mendax
Plecopterodes moderata
Prodotis stolidia
Trigonodes hyppasia
Eublemma anachoresis
Eublemma ecthamata
Eublemma ragusama
Lithacodia blandella
Bryophilopsis lunifera
Callopistria maillardi
Leucania stenographa
Sesamia nonagroides
Spodoptera cilium



Spodoptera litura
Tathorynchus exsiccate
Adisura affinis
Helicoverpa armigera
Lophiophora purpurata
Hypena abstitalis
Hypena lividalis
Hypena obstitalis
Agrotis spinifera
Chrysodeixis acuta
Plusia signata

NOLIDAE

Gigantoceras perineti
Maurilia arcuata
Negeta luminosa
Odontestis prostica
Pardasena roeselioides
Petrinia lignosa
Xanthodes malvae
Earias biplaga
Earias cupreoviridis
Westermannia agrapha

PYRALIDAE

Isotbaura serraticornis
Sacasla erythopis
Crocidolomia binotalis
Lamoria imbella
Noorda blitealis
Parapoynx fluctuosalis
Mussidia nigrivenella
Hypsopygia ignetimbrialis
Omphalobasella suffusalis
Diaphania indica
Lamprophaia ablactalis
Desmia horaria
Glyphodes argyraspides
Hydriris ornatalis
Hymenia recurvalis
Maruca vitrata



Notarcha quarternalis
Palpita metallata
Pardomima callixantha
Pardomima zanclophora
Psara atritermina
Samoedes cancellalis
Sylepte ovialia
Synclera traducalis

SPHINGIDAE

Basiothea medea
Cephonodes hylas virescens
Hippotion Osiris
Nephele funebris
Nephele oenopion
Neopolyptychus ancylis
Polyptychus andosa
Polyptychus coryndoni
Pseudoclanis molitor
Pseudoclanis occidentalis
Agrius convolvulus
Acheronita atropos
Coelonia fulvinotata

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